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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,898	11/21/2003	Jack C. Wybenga	2003.07.005.BN0	5311
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/720,898

Applicant(s)

WYBENGA ET AL.

Examiner

Syed Bokhari

Art Unit

2609

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.



DANG T. TON

SUPERVISORY PATENT EXAMINER

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 17 is/are rejected.
- 7) ☒ Claim(s) 2-8, 10-16 and 18-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

Claim Objections

1. Claim 1-21 are objected to under 37 CFR 1.75 because of the following informalities:

For claim 1 line 12, the occurrence of "a Layer 2 address" refers back to "Layer 2 addresses" previously cited in lines 5-6, if it is true, it is suggested to applicant to change "a Layer 2 address" to --the Layer 2 address--.

For claim 9 line 12, the occurrence of "a Layer 2 address" should be changed to --the Layer 2 address--.

For claim 17 lines 5-6, the occurrence of "data packets" should be changed to --the data packets--. Similarly in lines 8-9, the occurrence of "a Layer 2 address" should be changed to --the Layer 2 address--.

Claims 2 and 3-8 are objected because they depend from claim 1.

Claims 10-16 are objected because they depend from claim 9.

Claims 18-20 are objected because they depend from claim 17.

2. Note: The phrase "capable of" recited in claim 1 (lines 5-7) and claim 17 (lines 5-7) is not positively recited claims limitations. Therefore, the limitations after the phrase are not considered the claim limitation. It is suggested to applicant to remove the phrase.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1, 9, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Civanlar et al. (USP 6,078,963) in view of Kumar et al. (US 2004/0156371 A1).

For claim 1, Civanlar et al. discloses for use in a telecommunication network, a router comprising: a switch fabric (see column 2 lines 41-44 in Detailed Descriptions of Preferred Embodiments); a N Layer 2 modules coupled by the switch fabric (see column 3 lines 5-10 in Detailed Descriptions of Preferred Embodiments) and a first one of the Layer 2 modules comprises a Layer 3 routing engine capable of forwarding a first received data packet through the switch fabric directly to a second one of the Layer 2 modules using a Layer 3 address associated with the first received data packet if the first Layer 2 module does not recognize a Layer 2 address associated with the first received data

packet (see column 3 lines 28-47 in Detailed Descriptions of Preferred Embodiments). Civanlar et al. discloses all the subject matter of the claimed invention with the exception of each the N Layer 2 modules capable of receiving data packets in Layer 2 frames and forwarding the received data packets using Layer 2 addresses associated with the Layer 2 frames. Kumar et al. from the same or similar field of endeavor teaches of each N Layer 2 modules capable of receiving data packets in Layer 2 frames and forwarding the received data packets using Layer 2 addresses associated with the Layer 2 frames (see paragraph 0042 lines 1-10 on page 3). It would have been obvious to one of ordinary skill in the art at the time of invention was made to use of the same means for N Layer 2 modules of receiving data packets in frames and forwarding them using Layer 2 addresses associated with the Layer 2 frames as taught by Kumar et al. in the communications network of Civanlar et al. The means for receiving data packets in layer 2 frames and to forward it by using layer 2 address as taught by Kumar et al. can be modified/implemented in the communication arrangement of Civanlar et al. by introducing a parser and L2 lookup units between the network interface and the forwarding engine in figure 1 of Civanlar et al. The motivation for using N Layer 2 lookup modules with the parser is to receive layer 2 information of Ethernet destination address and send it to forwarding engine for switch fabric.

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For claim 9, Civanlar et al. discloses a network having a plurality of the routers (see lines 1-5 in Abstract). The rest of the claim limitations are same as of claim 1 and, therefore, are rejected.

For claim 17, Civanlar et al. discloses a switch fabric (see column 2 lines 41-44 in Detailed Descriptions of Preferred Embodiments) and Civanlar et al. also discloses a method of routing data packets in the router comprising the steps: receiving a first data packet in a first Layer 2 module; determining if the first Layer 2 module recognizes a Layer 2 address associated with the first received data packet; and if the first Layer 2 module does not recognize the Layer 2 address associated with the first received data packet, using a Layer 3 routing engine associated with the first Layer 2 module to forward the first received data packet through the switch fabric directly to a second one of the Layer 2 modules (see column 3 lines 28-33 in Detailed Descriptions of Preferred Embodiments). Civanlar et al. discloses all the subject matter of the claimed invention with the exception of N Layer 2 modules coupled by the switch fabric, wherein each of the N Layer 2 modules receives data packets in Layer 2 frames and forwards the received data packets using Layer 2 addresses associated with the Layer 2 frames. Kumar et al. from the same or similar field of endeavor teaches the steps of N Layer 2 modules coupled by the switch fabric, wherein each of the N Layer 2 modules receives data packets in Layer 2 frames and forwards the received data packets using Layer 2 addresses associated with the Layer 2 frames (see paragraph 0042 lines 1-10 on page 3). It would have been obvious to one of

ordinary skill in the art at the time of invention was made to use of the same method of the N Layer 2 modules receives data packets in Layer 2 frames and forwards the received data packets using Layer 2 addresses associated with the Layer 2 frames as taught by Kumar et al. in the communications network of Civanlar et al. The step for receiving data packets in N Layer 2 modules receives data packets in Layer 2 frames and forwards the received data packets using Layer 2 addresses associated with the Layer 2 frames as taught by Kumar et al. can be modified/implemented in the communication arrangement of Civanlar et al. by introducing a parser and L2 lookup units between the network interface and the forwarding engine in figure 1 of Civanlar et al. The motivation for using the step of N Layer 2 lookup modules with the parser is to receive layer 2 information of Ethernet destination address and send it to forwarding engine for switch fabric.

Allowable Subject Matter

6. Claims 2-8, 10-16 and 18-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim any intervening claims.
7. Claims 2-8, 10-16 and 18-21 would be allowable if written to overcome the objection under 37CFR 1.75 set forth in the office action.

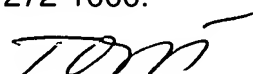
Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USP 6,259,699 (Opalka et al.), US 2003/0067925 A1 (Choe et al.) , US 2002/0118682 A1 (Choe Myongsu), US 2003/0210686 A1 (Terrell et al.), US 2003/0161319 A1 (Okagawa et al.), US 6,157,644 (Bernstein et al.) and US 2003/0084219 A1 (Yao et al.).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed Bokhari whose telephone number is (571) 270-3115. The examiner can normally be reached on Monday through Friday from 7:30 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dang Ton can be reached on (571) 272-3171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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